

The Relationship between Mastery Motivation and Ability of Children in Guangxi Zhihui Mingzhu Kindergarten

Shijian Wei,¹ Tidarat Samanpan ²

Abstract

The objectives of this study were (1) Study the content of children's learning and Mastery Motivation in Guangxi Kindergarten Zhihui Mingzhu Kindergarten (2) To analyze the relationship between learning Mastery Motivation and learning ability of children in Guangxi Kindergarten Zhihui Mingzhu Kindergarten. Guangxi Kindergarten Zhihui Mingzhu Kindergarten in this study has a certain reputation in the education industry in Guangxi. A representative study was conducted on 270 preschool children aged 3-6 in the kindergarten. Through a questionnaire survey, demographic analysis was conducted on preschool children in the kindergarten, and the relationship between control motivation and ability was analyzed. Data was collected through online distribution of questionnaires, and descriptive statistical analysis was used Pearson correlation analysis and other methods are used to test hypotheses.

The result of this study found that found that in children's Mastery Motivation(instrumental indicators), object control motivation, action control motivation, peer control motivation, and adult control motivation all have a significant positive impact on learning ability, language ability, action skill ability, and emotional control ability. In children's Mastery Motivation (expressive indicators), happy emotions control motivation has a significant positive impact on learning ability, language ability, motor skill ability, and emotional control ability, while negative emotion control motivation does not have an impact on learning ability, language ability, or emotional control ability, but has a significant positive impact on motor

¹Master degree student in curriculum and instruction, Faculty of education, Nakhonratchasima College E-Mail: <1762327578@qq.com>

² Dr, lecturer in curriculum and instruction, Faculty of education, Nakhonratchasima College

skill ability. Develop precise object control, movement skills, and social awareness control skills for children of different ages and genders, focusing on individual and gender differences, enhancing children's enjoyable experiences in games, including establishing harmonious interpersonal relationships and ensuring full interaction between children and the environment.

Keywords: Guangxi Zhihui Mingzhu Kindergarten, Mastery Motivation, Relationship, Ability

Introduction

The education of children has always been a constant topic. The concern of teachers and the expectations of parents accompany the growth of every child. Some parents believe that when preschoolers are still very young, it's just time for them to enjoy themselves and start learning at school. In fact, it's too late. Children aged 0-6 years are an important period of their brain development. Learning and its methods in early childhood have unique characteristics. On the one hand, it directly occurs in games and daily life, and on the other hand, it takes ability development as the learning result. In terms of learning, human learning can be divided into broad and narrow senses. The former refers to the long-term and profound changes in human behavior or behavioral potential that occur through the acquisition of experience in life. It includes not only external environmental stimulation and individual practice, but also the interaction between individuals and the environment. Therefore, not only planned practice or training is learning, but accidental life experiences can also lead to learning behavior. The latter refers to learning conducted by students in schools. However, preschool children are different from children's learning outcomes in that they are not described by "achievement", but rather by "development" and "growth". In other words, the learning outcomes of young children should be the development and growth of cognitive, emotional, self, and behavioral habits through the learning process, ultimately achieving comprehensive development. For this reason, we study young children's learning, and the indicator should be the development of various abilities, not scores. Children are constrained by their level of physical and mental development, and their learning shows unique ways and characteristics. Young children's learning is influenced by two factors: motivation and

evaluation. Stimulation of Mastery Motivation and improvement of self-evaluation methods can effectively improve the effectiveness of young children's learning activities.

The Ministry of Education has also formulated the "Guidelines for the Learning and Development of Children Aged 3-6" to standardize the learning of preschool children, It is pointed out that "young children's learning is based on direct experience and conducted in games and daily life." It can be seen that young children's learning is a special form of human learning activities, a process in which young children actively explore the physical world, natural environment, and social environment around them through their own unique ways, and is a broad sense of learning.

Guangxi Experimental Kindergarten was founded in 1986. Guangxi Zhihui Mingzhu Kindergarten is the flagship garden of Guangxi Experimental Kindergarten Education Group. The kindergarten was established in September 2019 and is located in the urban area of Yongning District, Nanning City, with a construction area of 3200 square meters and an outdoor area of 2200 square meters, The design of the kindergarten environment is carefully considered to provide a high-quality and inspiring learning environment for young children. At the same time, in practice, the kindergarten has developed a "full education curriculum" system of "childish curriculum+selective curriculum" suitable for children's development, achieving the cultivation of fully developed "childish children" with "self care, self-confidence, and self-consciousness." The core management team includes experts in the preschool education industry, masters and doctors, and other university teachers as expert kindergarten directors to guide kindergarten education and teaching. Therefore, taking this kindergarten as the research object has representative significance.

Although preschool education has developed over the years and has established certain standards, experts and scholars are increasingly meticulous in their research directions, and parents and preschool education practitioners are also aware of the need to follow the learning characteristics of children in teaching. However, the development of the times always brings new problems. In kindergarten teaching activities, through long-term follow-up observation and research findings of ecological activities in preschool class teaching, There are a large number of "ineffectiveness" phenomena in children's learning, and there are a large number of children "wandering" outside the classroom. In other words, some young children are unable to focus their attention on limited activity content, resulting in phenomena such

as skipping, wandering, performing small action controls, walking around casually, and even playing with toys. This study starts with preschool children's Mastery Motivation as a starting point to study their learning ability, investigate the impact of Mastery Motivation on learning ability, and provide data reference for practitioners in the early childhood education industry to carry out teaching reform. At the same time, it can also allow parents and teachers to adjust their education methods based on the survey data, providing better quality education for the physical and mental development of preschool children.

Research objectives

1. Study the content of children's learning and Mastery Motivation in Guangxi Kindergarten Zhihui Mingzhu Kindergarten.
2. Study the relationship between learning Mastery Motivation and learning ability of children in Guangxi Kindergarten Zhihui Mingzhu Kindergarten.

Research hypothesis

H1 Guangxi Zhihui Mingzhu Kindergarten children's demographics have differences in learning Mastery Motivation.

H2 Guangxi Zhihui Mingzhu Kindergarten children's learning Mastery Motivation has a positive impact on ability.

Literature review

This research is based on the concept

1. Mastery Motivation theory.
2. Theory of Competence for Preschool Children
3. Previous studies
4. Conceptual Framework

Conceptual framework

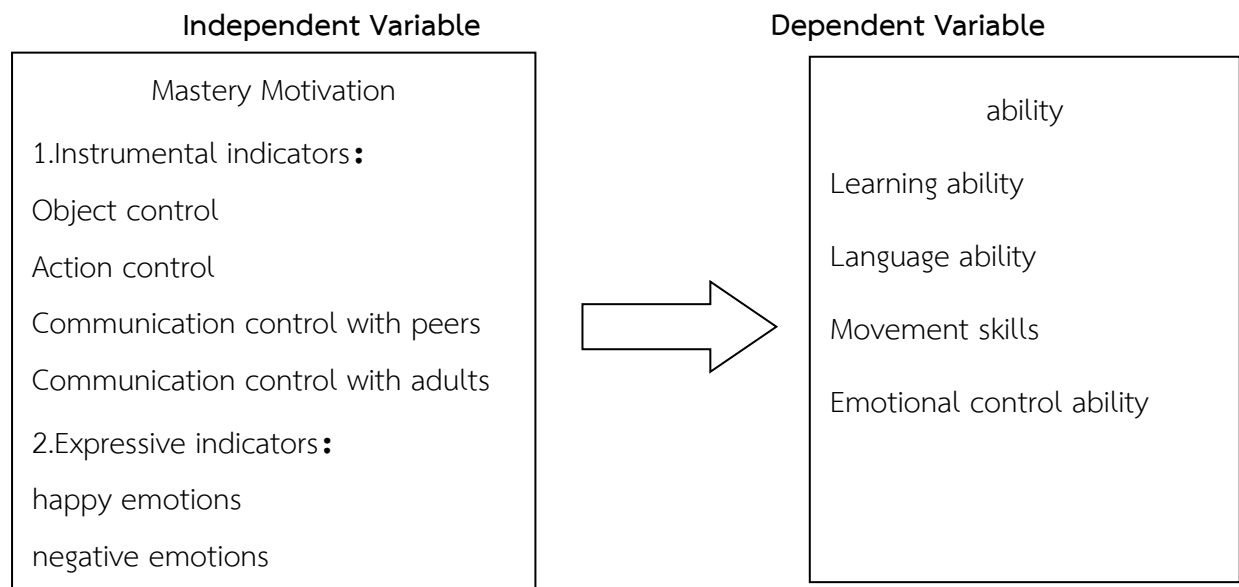
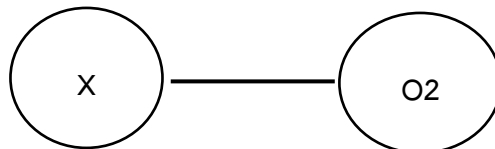


Figure 1 Conceptual Framework

Research design

One group posttest only Design



X is the Mastery Motivation

O2 is a post-test

Population and sample

1) Population

The research object of this study is children aged 3-6 who are currently studying in Guangxi Zhihui Mingzhu Kindergarten (270 people)

2) Content : This article empirically studies the learning Mastery Motivation of children in Guangxi Zhihui Mingzhu Kindergarten, including object control, action control, control with peers, and control with adults in instrumental indicators, as well as the control

of pleasant emotions in expressive indicators. What are the negative emotion Mastery Motivations, and whether they have an impact on the kindergarten children's abilities?

Research instruments

The research design used is One-Group- Posttest Only Design, Overall structure of the questionnaire: This questionnaire will be distributed to parents (270 people) of children aged 3-6 years who are studying in Guangxi Zhihui Mingzhu Kindergarten. The questionnaire consists of three parts, with a total of 21 questions. include.

Part 1: Personal Information The personal information of a participant. This section contains 3 questions, including gender, age, and grade.

Part 2: Preschool children's Mastery Motivation

Preschool children Mastery Motivation. There are 17 questions in this section, including Instrumental indicators: object control, action control, communication control with peers, and communication control with adults.

Expressive indicators: happy emotions, negative emotions

Table 1 Interpretation Scale of Descriptive Statistics

5 = Strongly agree

4= Agree

3= Neutral

2= Disagree

1= Strongly disagree

Table 1 Interpretation Scale of Descriptive Statistics

Scale	Range
Strongly agree	4.21-5.00
Agree	3.41-4.20
Neutral	2.61-3.40
Disagree	1.81-2.60
Strongly disagree	1.00-1.80

The table above shows the scale range based on the questionnaire. Researchers will use these ranges to explain the mean and standard deviation of preschoolers' Mastery

Motivation.

Part 3: Preschool children's abilities, There are four questions in this section, including learning ability, language ability, motor skills, and emotional control ability.

Table 2 Interpretation Scale of Descriptive Statistics

5 = Strongly agree

4= Agree

3= Neutral

2= Disagree

1= Strongly disagree

Table 2 Interpretation Scale of Descriptive Statistics

Scale	Range
Strongly agree	4.21-5.00
Agree	3.41-4.20
Neutral	2.61-3.40
Disagree	1.81-2.60
Strongly disagree	1.00-1.80

The table above shows the scale range based on the questionnaire. Researchers will use these ranges to explain the mean and standard deviation of preschoolers' abilities.

Data Collection

Reliability analysis refers to the degree of consistency of the results obtained when the same method is used for repeated measurements of the same subject. Its use measures the reliability of the responses sample, i.e., whether the sample has truly answered the scale-type questions. There are various methods to measure reliability, and the commonly used reliability coefficients include Cronbach's alpha coefficient, folded half coefficient, and retest reliability, which can analyze in SPSS.

Researchers analyze the quality of the questionnaire and generally choose the reliability test and validity test. The Cronbach's Alpha evaluates the reliability test. The values of these two indicators range from 0 to 1. It is generally considered that the larger the value, the better. As following for interpreting alpha for dichotomous questions or Likert scale questions are: (Cronbach, 1951).

Table 3 Cronbach's alpha

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Researchers conducted a reliability analysis of 17 questions about controlling motivation, and concluded that $\alpha = 0.891$, indicating that the reliability is very high, and the questionnaire for preschool children to Mastery Motivation is reliable (as shown in Table 4)

Table 4 Reliability of Mastery Motivation

Cronbach's Alpha	N of Items
0.891	17

The researchers analyzed the reliability of 4 questions in the capability and concluded that $\alpha = 0.845$, indicating that the ability questionnaire for preschool children is credible (as shown in Table 5).

Table 5: Reliability of Ability

Cronbach's Alpha	N of Items
0.845	4

The Questionnaire was conducted by language experts to create an English-Chinese translation of the same content.

Data Analysis

Part 1 :descriptive analysis of demography.

This section has 3 questions related to demographic statistics, such as gender, age, and grade. This section is a descriptive analysis of frequency and percentage.

Part 2: Controlling Motivation

This section contains 17 factors that Mastery Motivation. Descriptive analysis was conducted using mean and standard deviation.

Part 3: Preschool children's abilities

This section uses mean and standard deviation for descriptive analysis.

Table 6 Interpretation Scale of Descriptive Statistics

Scale	Range
Strongly agree	4.21-5.00
Agree	3.41-4.20
Neutral	2.61-3.40
Disagree	1.81-2.60
Strongly disagree	1.00-1.80

Part 4: hypothesis testing.

This section uses the t-test and F-test (ANOVA) for H1

Use regressive analysis for H1

The inferential statistics that researchers will use in this study. Using these specific statistical data, researchers will analyze the independent variables that Mastery Motivation, which are positive. Researchers will apply a simple correlation model to test which independent factors have a strong or weak relationship with the dependent variable (Mastery Motivation). Researchers will use correlation analysis to test which independent variables (demographics) Mastery Motivation and dependent variables (abilities) have a strong or weak relationship.

Table 5 Interpretation Scale of Descriptive Statistics

Range of Correlation Coefficient Values	Level of Correlation	Range of Correlation Coefficient Values	Level of Correlation
0.80 to 1.00	Very Strong Positive	-1.00 to -0.80	Very Strong Negative
0.60 to 0.79	Strong Positive	-0.79 to -0.60	Strong Negative
0.40 to 0.59	Moderate Positive	-0.59 to -0.40	Moderate Negative
0.20 to 0.39	Weak Positive	-0.39 to -0.20	Weak Negative
0.00 to 0.19	Very Weak Positive	-0.19 to -0.01	Very Weak Negative

The table above shows the scale range based on the questionnaire. This study will use these ranges to explain the mean and standard deviation between preschoolers' Mastery Motivation and ability in descriptive statistics.

Conclusion

Since entering the 21st century, China's early childhood education has made significant progress and achieved brilliant achievements. Especially with the promulgation and implementation of the National Medium and Long Term Education Reform and Development Plan (2010-2020) in 2010, China's early childhood education industry ushered in a spring of development; At the same time, the Chinese government and local governments at all levels have formulated a series of guidelines and policies for the development of early childhood education in accordance with the spirit of the "Plan ", and the reform and development of early childhood education are actively being promoted. As young children grow older, their various aspects of development and development have their own characteristics, and the kindergarten in this study is no exception. Therefore, whether it is kindergarten managers, teachers, and parents, it is urgent to understand children's ability mastery from their learning feedback, and carry out corresponding teaching reforms to enable the kindergarten to innovate and improve in curriculum design, teacher training, and other aspects, In order to better develop the physical and mental health of preschool children.

1. In the survey based on demographic statistics, it can be seen that the proportion of boys in the kindergarten is 50.37% for "boys" and 49.63% for girls. It can be seen that the

proportion of male and female enrollment in this kindergarten is equivalent. From the distribution of children's grades, the majority of the samples are "middle class", with a total of 96.0 children, accounting for 35.56%. The proportion of "big class" samples is 33.33%. According to the survey, the kindergarten has 2 small grade, 3 middle grade, and 3 large grade. According to the data, the enrollment of each class in the kindergarten is controlled at 35 people, not exceeding 35 people. According to the ratio of three teachers per class, children can receive good care.

2. The survey data on children's Mastery Motivation shows that the scores of "object control" and "action control" in the instrumental indicators of children's Mastery Motivation in this kindergarten are relatively low, in a "agree" state. The lowest score is "action control", with a score of 3.879, and the highest score is "peer control" with a score of 4.332. In terms of specific analysis, most factors are in "strongly agree", The highest score for 'being very engaged in playing with other children' is 4.363. Among the factors that are 'agree', there are 'children who can try to control large toys' in 'object control' For items and toys with a large number of parts, we will first explore each component before doing other things. "And for the three factors in ability control, no factor in the entire questionnaire is in the "Neutral", "disagree", "less agree", "Strongly disagree"

Children have a relatively high level of control over "happy emotions" in their motivation (expressive indicators), with all factors being "strongly agree". The highest score is "excited when understanding something", with a score of 4.559. The lowest score is "smiling or excited when playing with toys", with a score of 4.433. For the control of 'negative emotions', the score is lower than the control of happy emotions, with the highest score being 'feeling frustrated when you try hard but still cannot do it' at 3.870, and the lowest score being 'crying when trying hard to do something'

3. The survey data on children's abilities shows that all the children in this kindergarten have a "agree" mastery of abilities, with the highest score being in the "language ability" at 4.122 and the lowest score being "emotional control ability" at 3.537.

4. In the study of demographic and Mastery Motivation differences, it was found that different gender samples of children did not show significant differences in Communication control with peers, Communication control with adults, happy emotions, and negative

emotion. In addition, there was a significant difference in pleasure emotion control, and the average value of boys (4.65) was significantly higher than that of girls (4.44).

The different samples of children in different grades showed significant differences in Communication control with peers, Communication control with adults, happy emotions, and negative emotion, and the motivation for control in higher grades was significantly higher than that in lower grades.

5. A survey on the relationship between mastery motivation and ability found that in children's mastery motivation (instrumental indicators),"object control, action control, Communication control with peers, Communication control with adults motivation "all have a significant positive impact on learning ability, language ability, action skill ability, and emotional control ability.

In children's Mastery Motivation (expressive indicators), happy emotions motivation has a significant positive impact on learning ability, language ability, motor skill ability, and emotional control ability, while negative emotion Mastery Motivation does not have an impact on learning ability, language ability, or emotional control ability, but has a significant positive impact on Movement skills ability.

Interpretation

According to relevant research on Mastery Motivation, it can be seen that the development trend of Mastery Motivation is manifested as a gradual decrease in action control and object control behavior, but the role of fine movements gradually increases, the complexity gradually increases, and the difficulty of large movements also gradually increases. Social control behavior is gradually increasing, and the objects of control have expanded from parents and teachers to peers. Liu (2012), an early theorist, Hunt (1965), described a spiral cycle in which the pursuit of control promotes cognitive development, which in turn strengthens the motivation to control a new environment. Many contemporary theorists also support the view that motivation and ability may be intertwined, especially for young children (Scarr, 1981) who is active, curious, and eager to participate in the environment. This intrinsic driving force motivates them to grow new skills. This study also indicates that demographics is closely related to Mastery Motivation, as well as Mastery Motivation and ability, and previous studies have statistical significance.

1. In terms of the relationship between demographic statistics and Mastery Motivation. In this study, the higher the grade of children, the more significant their control motivation. As Broussard and Garrison (2004) examined the relationship between academic motivation and academic performance in lower primary school children (first and third grades). It was found that the higher the level of mastery motivation, the higher the mathematical and reading abilities, and the relationship between motivation and academic achievement was stronger in older children than in younger children.

2. The relationship between mastery motivation and ability. In this study, mastery motivation has a significant positive impact on children's learning ability, language ability, motor skill ability, and emotional control ability. As Gilmore and Cuskelly (2009) found in their survey of children with developmental disorders, just like normal children, for children with developmental disorders, A high level of control motivation should also generate a high level of ability. Lynch, D.J. (2006) investigated the intrinsic interest of 6-month-old infants in exploratory and problem-solving behaviors, while conducting control measurements at 12, 30, and 48 months of age. The results of longitudinal data analysis indicate that there is a significant correlation between control scores and children's cognitive ability scores, as well as observed social abilities.

Recommendation

In this study, we analyzed the relationship between mastery motivation and ability of preschool children in Guangxi Zhihui Mingzhu Kindergarten. Through data analysis, the researchers verified the relationship between demographics and mastery motivation, mastery motivation and ability through data validation. Based on the analysis of relevant data on mastery motivation and ability, the researchers put forward the following suggestions:

1. Through investigating the motivation of kindergarten children to control, it was found that there is no difference between boys and girls in "object control, action control, Communication control with peers, Communication control with adults, ,happy emotions and negative emotion control". However, the difference in pleasure level between boys is greater than that of girls. Therefore, in terms of encouragement, teachers should pay more attention to the highlights and shortcomings of male children's behavioral performance, understand their recent development areas, and pay attention to the level that children have achieved

through hard work, Praise young children for their perseverance, focus, patience, and fearlessness in learning, rather than simply saying 'You're great'. Teacher praise should also guide young children to attribute success to their own efforts, which is a controllable factor for young children themselves. When young children think and explore in order to complete tasks and put in effort, teachers should timely praise the process, which helps them form a good attribution pattern, that is, the performance of young children depends on the effort put in.

As the significance of Mastery Motivation in higher grades is higher than that in lower grades, teachers can focus on individual and gender differences according to the learning and growth situation of children of different ages. This study found that the development of various dimensions of Mastery Motivation in young children is not balanced. Therefore, teachers should have a targeted understanding of children's Mastery Motivation, stimulate their learning motivation, and focus on guiding the relatively slow development aspects.

2. The survey analysis results show that in children's mastery motivation (instrumental indicators), each mastery motivation factor will have a significant positive impact on children's mastery of various abilities. Therefore, precise object control, motor skills, and social awareness skills can be developed for children of different ages and genders, Megan M. McClelland and Claire E. Cameron (2018) through comprehensive research pointed out Fine motor skills are a prerequisite for children's early learning, laying the foundation for their long-term development and developing together in a two-way collaborative manner. This means that the cultivation of fine motor skills not only enhances the fine motor skills themselves, but also promotes the development of cognitive abilities such as executive function, and vice versa. In daily teaching and daily life, teachers and parents need to consciously encourage and guide children to engage in hands-on operations, promoting the development of fine movements.

In children's Mastery Motivation (expressive indicators), joyful emotion control motivation has a significant positive impact on learning ability, language ability, motor skill ability, and emotional control ability, while negative emotion control motivation does not have an impact on learning ability, language ability, or emotional control ability, but has a significant positive impact on motor skill ability. Therefore, the kindergarten can use games to strengthen the perspective of children in kindergarten games and establish a kindergarten

game curriculum view to unleash children's subjectivity in game courses, including considering children's interests and needs when setting game curriculum goals; When choosing game course content, respect the ideas and rights of young children; During the implementation of game courses, unleash the creative abilities of young children; When evaluating game courses, pay attention to children's autonomous reflection; Once again, provide children with a good gaming environment, including providing open gaming space, ensuring sufficient gaming time, placing appropriate gaming materials, and creating a relaxed psychological atmosphere; Finally, enhance the joyful experience of young children in games, including establishing harmonious interpersonal interactions and ensuring full interaction between young children and the environment.

Further research

Firstly, due to limitations in research funding, researchers, and other factors, the survey subjects of this article mainly focus on preschool children in Guangxi Zhihui Mingzhu Kindergarten, without studying the sample of preschool children in Guangxi. Other kindergarten children may also have unique regional characteristics. The focus of future research will be to expand the sample range and focus on children from other regions and kindergartens. Due to differences in culture, customs, and social customs in different regions, the behavior of children in different kindergartens in other regions and kindergartens is also different. We attempt to identify the differences and behavioral characteristics of children in kindergartens.

Secondly, the behavior of children may vary depending on the duration of the study. This article only selects cross-sectional data as the research object and does not consider the process of changes in children's behavior over time. In the future, it may be necessary to continuously observe fixed observation points and accumulate data for more than five years for analysis, in order to draw the conclusion that satisfaction has a temporal dynamic change. With the continuous development of the economy, the behavior patterns of children have undergone tremendous changes. Therefore, future research will focus on continuous time fixed and tracking observations; Obtain specific information on the development of children's abilities at different time points.

References

- Cronbach, Lee J. (1990). *Essentials of psychological testing*. New York: Harper Collins.
- Hunt, J.M. (1965). *Intrinsic Motivation and Its Role in Psychological Development*. In: Levine, D., Ed., *Nebraska Symposium on Motivation*, Vol. 13, University of Nebraska Press, Lincoln, 189-282. <https://www.scirp.org/journal/paperinformation?paperid=83977>
- Gilmore, L., & Cuskelly, M. (2009). A longitudinal study of motivation and competence in children with Down syndrome: Early childhood to early adolescence. *Journal of Intellectual Disability Research*, 53(5), 484–492.
- Gredler, M.E., Broussard, S.C. and Garrison, M.E.B. (2004) The Relationship between Classroom Motivation and Academic Achievement in Elementary School Aged Children. *Family and Consumer Sciences Research Journal*, 33, 106-120.
- Lynch, D. J. (2006). *Motivational Factors, Learning Strategies and Resource Management as Predictors of Course Grades*. *College Student Journal*, 40, 423-428.
- Scarr, S. (1981). *Testing for children: Assessment and the many determinants of intellectual competence*. *American Psychologist*, 36(10), 1159–1166.
- Wang, J., & Barrett, K. C. (2013). Mastery motivation and self-regulation during early childhood. In K. C. Barrett, N. A. Fox, G. A. Morgan, D. J. Fidler, & L. A. Daunhauer (Eds.), *Handbook of self-regulatory processes in development: New directions and international perspectives* (pp. 337–380).